# satisfaction of patients in radiographic department

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#### **Abstract**

Introduction. Patients' satisfaction arises from their appraisal of experience in hospital services and measuring patients' satisfaction in a hospital has become a global phenomenon. To improve on patients' satisfaction, radiographers have to imbibe the right ethical attitude in their conduct while discharging duties to patients during radiological examination. The objective of this study is to understand from the patients' perspective the ethical conduct of radiographers and radiology staff that constitute factors in patient satisfaction during the routine radiological examination. The rationale of the study is to use the findings to improve radiological service delivery and improve on patient satisfaction.

Methods: This is a cross-sectional descriptive study in which 30 respondents (outpatients) in hospital ALKHDRA in Tripoli were surveyed to ascertain their satisfaction with the ethical conduct of radiographers and services provided by radiology Technicians in the department. The data were analyzed using descriptive statistics at 95 % confidence interval for the mean.

#### **Results:**

radiographers' explaining his/her experience, expectation, knowledge and equipment procedure (76%). However, they did well in some aspects including observation of professional boundaries with patients during examination and equity in treatment for the patients during the radiological examination, It was a good communication by the radiographer (63%), and services provided by staff in the department. Also, there is no significant difference in the satisfaction level experienced by patients in the radiographic department except the time waiting for examination during the crowded day, And patient condition which could change at any time especially in Trauma Radiography.

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#### **Conclusion:**

our study showed the patient's satisfaction and good ethics of the technicians in the Department of Radiology. however, there is disagreement due to long waiting and this is what worries the patient due to overcrowding situations at certain times.

**Keywords**: ALKHDRA hospital, Patients' satisfaction, Ethical/professional conduct, Radiographers, Patients' perception.

#### Introduction

Patients' satisfaction arises from their appraisal of experience in hospital services; it involves likes and dislikes which are internal and external to the patients and also relates to the extent to which general health care needs and condition-specific needs are met [1]. A Patient's likes may show positive internal assessment while his dislikes could be appreciated by other patients in their

own assessments which he/she has no control over and therefore external to him/her. What constitutes a satisfactory health service to one patient may not be for another. Measuring client or patient satisfaction has become an integral part of hospital management strategies across the globe [2, 3]. Moreover, the quality assurance and accreditation process in most countries require that the satisfaction of clients be measured on a regular basis [2, 3]. The desired need for the measurement of patient satisfaction has been largely driven by the underlying politics of "new public management" [4, 5] and the concomitant rise in the health consumer movement, with patient satisfaction being one of the articulated goals of healthcare delivery. Consumer perception of health care is largely ignored by health care providers in low-income countries [6–8]. A search of the literature reveals that patients' satisfaction with health services and as a matter of fact radiology in low-income countries is on the increase but less than what is obtainable in the Western countries [6–8]. Clinical radiography integrates scientific knowledge and technical skills with effective patient interaction to provide quality patient care and useful diagnostic information [9].

Effective communication between patients and providers has become imperative in radiological diagnosis[9, 10]. Radiographers, therefore, should remain sensitive to the physical and emotional needs of patients through good communication, patient-care skills and professional/ ethical conduct [9, 10]. The ethical duties of radiographers include treating patients with respect and dignity and maintaining patient privacy and confidentiality at all times[9, 11]. Professional/ethical relationships and responsibilities outline trust form the basis of

the relationship between a radiographer and a patient [9]. Consequently, it is expected from radiographers to behave in a manner that justifies public trust and confidence in order to uphold their professional ethics and serve both public and private interests [9, 12]. The code of conduct for radiographers makes provision for professional and ethical standards that radiographers must adhere to [12]. Radiographers have to ensure a safe working environment for the benefit of staff, patients and visitors and are also legally accountable for their professional actions and for any negligence regarding to patient's care [9, 11]. Radiographers have at times failed or excelled in their ethical and professional. This study researches the impact of healthcare worker satisfaction on patient satisfaction. Furthermore, the aim of the study is to assess which are the parameters with both the greatest impact on healthcare worker job and on patient satisfaction with services. Defining these relations and factors affecting the quality of work and services will create a basis for the management of important factors which affect both: healthcare worker satisfaction and patient satisfaction.

#### Collection of data

This is a cross-sectional descriptive study in which patients who had undergone radiological examination were surveyed to understand their level of satisfaction with the ethical and professional conduct of radiographers and other staff services before, during and after the examination.

#### **Methods:**

Our longitudinal research was based on a pilot study of different age people who had recently been admitted to a hospital. In the pilot study, all patients (\$70\$years of age) who were admitted to the radiographic department at AL KHADRA hospital between June and October 2017, were asked to participate. This led to the inclusion of 30 patients were randomly media. Measures included quality of receipt in a radiographic department, patients' perceptions of quality of integrated care delivery and patients' experiences with hospital care. We used descriptive statistics, correlations, and multilevel analyses The questionnaire about patient satisfaction with healthcare services in public hospitals in ALKHADRA HOSPITAL Tripoli, in addition to general questions such as , gender, age, source of payment for radiological services, and Type of radiographic technique examination . Included questions about the level of satisfaction with hospital in radiographic department procedures and regulations. Eight response levels were offered (from highly satisfied to highly dissatisfied) for all of the questions concerning the level of satisfaction .

The questions used to determine patient satisfaction were as follows:

- 1. Services rendered in the radiology department and patients' reaction
- 2. Overall satisfaction with care received in radiographic department
- 3. The level of attention provided by the radiographer
- 4. Was the radiographer able to disclose his/her competence and limitations where appropriate in the process of service provision?
- 5. The preparation for your specific scan was adequately explained.

The literature on the quality of care in health systems is very extensive and at the same time difficult to systematize. Depending on the disciplinary paradigm, quality can be understood in diverse ways, using different terms, labels, and models. A large number of authors and institutions have been involved in defining and measuring the quality of healthcare patient satisfaction [13-14] Based on the above, the conclusion can be drawn that a large number of authors have studied the quality of healthcare services and factors that affect patient satisfaction. However, comparatively few authors have analyzed the impact of healthcare worker satisfaction on patient satisfaction, leaving something of a gap in the scientific results. This research trying to provide answers to several essential questions:

- 1. Do satisfied healthcare workers (physicians and technician ) contribute to patient satisfaction?
- 2. Can patient satisfaction be achieved when employees are dissatisfied?
- 3. Which are the criteria that most affect the ranking of institutions in terms of employee and patient satisfaction?

Results and discussion

Descriptive statistics are displayed in Table 1. the percentage of the male participants in this study is 83%, and only 16.7% of females involvement.

The total number of patients were active in this work is 30 The respondents ranged from 1 and 70 years old.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	25	83.3	83.3	83.3
Valid	female	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Table.1 Frequency and Percent the gender of patients.

The highest rate with the patients of 55 years old about 13% it is shown in Table2.

Table .2 Frequency and Percent the age of patients.

Age		Frequency	Percent	Valid Percent	Cumulative Percent
	1.00	1	3.3	3.3	3.3
	4.00	1	3.3	3.3	6.7
	5.00	2	6.7	6.7	13.3
	7.00	2	6.7	6.7	20.0
	8.00	2	6.7	6.7	26.7
	12.00	2	6.7	6.7	33.3
	13.00	2	6.7	6.7	40.0
	17.00	2	6.7	6.7	46.7
Valid	18.00	2	6.7	6.7	53.3
	32.00	2	6.7	6.7	60.0
	37.00	2	6.7	6.7	66.7
	40.00	2	6.7	6.7	73.3
	52.00	2	6.7	6.7	80.0
	55.00	4	13.3	13.3	93.3
	67.00	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

The type of examination is not compatible with the standardization of the time allowed to perform examinations. The examination depended on the state of the patient in. Table .3 shows the longest period was 15 minutes about 53%. Table4 shows the type of radiographic technique that is performed in the hospital and the frequency . The lower extremity imaging technique is the most used technique type 43% from this research.

Table .3 the time of procedures scan in radiographic department

		Frequency	Percent	Valid Percent	Cumulative Percent
	mint 10	3	10.0	10.0	10.0
	15	16	53.3	53.3	63.3
Valid	20	7	23.3	23.3	86.7
	30	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Table .4 Type of radiographic technique.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Head	2	6.7	6.7	6.7
	Lumbar	7	23.3	23.3	30.0
	Chest	4	13.3	13.3	43.3
Valid	pelvic	2	6.7	6.7	50.0
	Upper extremity	2	6.7	6.7	56.7
	Lower extremity	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

Table .5 The Services rendered in the radiology department and patients' reaction.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Convenient	3	10.0	10.0	10.0
37.11.1	Neutral	15	50.0	50.0	60.0
Valid	Not agree	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

#### Table .6 The physical appearance of the facilities and the quality of the equipment's

		Frequency	Percent	Valid Percent	Cumulative Percent
	Neutral	18	60.0	60.0	60.0
Valid	Not agree	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

#### Table .7 overall satisfaction of care received in radiographic department

		Frequency	Percent	Valid Percent	Cumulative Percent
	Convenient	3	10.0	10.0	10.0
37.11.1	Neutral	17	56.7	56.7	66.7
Valid	Not agree	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

#### Table .8 The level of attention provided by the /radiographer

		Frequency	Percent	Valid Percent	Cumulative Percent
	Convenient	7	23.3	23.3	23.3
37.11.1	Neutral	14	46.7	46.7	70.0
Valid	Not agree	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Table .9 Q- Was the radiographer able to disclose his/her competence and limitations where appropriate in the process of service provision?

		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	17	56.7	56.7	56.7
Valid	no	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

Table .10 The preparation for your specific scan were adequately explained.

		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	23	76.7	76.7	76.7
Valid	no	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Table.11 O Waiting time before the procedure?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	30	100.0	100.0	100.0

Table. 12 Was it a good communication by the radiographer?

		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	19	63.3	63.3	63.3
Valid	no	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

The best results can be achieved by increasing the time available to accomplish tasks in order to improve the satisfaction of the patient, and that clear from the questions the most answers was (Neutral) except answer of table 12 It was about Waiting time before the procedure? 100% yes. the Technician cannot be accused of the long period of waiting and there are many factors involved in the waiting time such as:

- 1. The patient's general condition. How well or how poorly is he or she functioning?
- 2. The range of motion and weight-bearing ability. Has the patient had a surgical procedure that restricts motion or limits weight bearing until it is healed?
- 3. The patient's strength and endurance. Will the patient become fatigued and be unable to complete the transfer with only stand-by assistance?
- 4. The patient's ability to maintain balance. Can the patient sit or stand for as long as the procedure requires?

5. The patient's ability to understand what is expected during the transfer. Is he or she responsive and alert? [15]

#### **Conclusion**

The results of our study have demonstrated that ethical and professional conduct of radiographers does influence patients' satisfaction and dissatisfaction with radiological examination and so are the services offered in the radiology department by the staff.

Also, it showed the patient's satisfaction and good ethics of the technicians in the Department of Radiology and the disagreement only was about the waiting time and this is what worries the patient due to overcrowding situations at certain times.

#### recommendation

To have satisfaction for Radiology Department and their staff

- 1.Good salary.
- 2. All equipment and machine should be of high quality.

#### References

[1]. Mohan DR, Kumar KS. A study on the satisfaction of patients with reference to hospital services. Int J Bus Econ Manag Res. 2011;1(3):15–25.

Online available at HTTP:// www.zenithresearch.org. /

- [2]. Assefa F, Moses A, Yohannes HM. Assessment of clients' satisfaction with Health Services deliveries at Jimma University Specialized Hospital. Ethiop J Health Sci. 2011;21(2):101–9.
- [3]. Smith M, Engelbrecht B. Guide to Assessing client Satisfaction at District Hospitals. Health Systems Trust, Durban (South Africa) 2001. ISBN1-919743-56-1
- [4]. Gill L, White L. A critical review of patient satisfaction. Leadership Health Serv. 2009;22(1):8–19.
- [5]. Hood C. The new public management in the 1980s: variations on a theme. J Acc Organ Soc. 1995;20(2–3):93–109.
- [6]. Hall MF. Patient satisfaction or acquiescence? Comparing mail and telephone survey results. J Health Care Mark. 1995;15:54–61.
- [7]. Rajani A, Salam B, Ariwa SSM, Masroor I. Do we need to improve? A customer satisfaction survey in ultrasound suite. PJR. 2011;21(2):84–8.
- [8]. Nyongesa MW. Determinants of clients' satisfaction with healthcare services at Pumwani Maternity hospital in Nairobi-Kenya. Int J Soc Behav Sci. 2014;2(2):011–7.
- [9]. Beyer L, Diedericks P. The attitude of radiographers towards patients in government hospitals in Bloemfontein. South African Radiographers. 2010;48(2):22–7.
- [10]. Campeau FE. Radiography: technology, environment, professionalism. Philadelphia: Lippincott Williams & Wilkins; 1999.

- [11]. Peer F. Professional ethics for radiographers. South African Radiographer. 2003;41(2):14–6.
- [12]. Peer F. What do we understand by the professional code of conduct for radiographers? South African Radiographer. 2003;41(1):5–6.
- [13]. Campbell NC, Murray E, Darbyshire J, Emery J, Farmer A, Griffiths F, et al. Designing and evaluating complex interventions to improve health care. BMJ. 2007; 334: 455-459.
- [14]. Workgroup on Quality, Measuring Health Care Quality: Obstacles and Opportunities, National Committee on Vital and Health Statistics, Washington, 2004.
- [15]. Patient Care and Safety, CHAPTER3, LWBK129-C03\_47-70.qxd 11/6/08 11:22 PM Page 51 Aptara Inc.
- [16]. Ogbonnia Godfrey Ochonma1\*, Charles Ugwoke Eze2, Soludo Bartholomew Eze1 and Augustine Obi Okaro2. Ochonma et al. BMC Medical Ethics "Patients» reaction to the ethical conduct of radiographers and staff services as predictors of radiological experience satisfaction: a cross-sectional study "Ethics (2015) 16:68 DOI 10.1186/s12910-015-0062-4

## رضا المرضى في قسم التصوير الاشعاعي.

### ■ أ . ليلي الطاهر عيسي العيساوي\*

#### ملخص

رضا المرضى ينشأ تقييمه من الخبرة في خدمات المستشفيات وقياس رضا المرضى في مستشفى أصبح ظاهرة عالمية. ولتحسين رضا المرضى، يجب أن يستوعب كل العاملين في قسم الأشعة ( من موظفي وفنيين واخصائيين) الموقف الأخلاقي الصحيح في سلوكهم أثناء أداء الواجبات للمرضى أثناء الفحص الإشعاعي والهدف من هذه الدراسة هو أن نفهم من وجهة نظر المرضى السلوك الأخلاقي من موظفي قسم الأشعة التي تشكل عوامل مهمة في رضا المرضىبم خلال الفحص الإشعاعي الروتيني. و المنطق الأساسي للدراسة هو استخدام النتائج لتحسين تقديم الخدمات الإشعاعية وتحسين رضا المرضى.

هذه دراسة وصفية مستعرضة تم خلالها استطلاع عن رأي 30 مريض ومرافق في (العيادات الخارجية - قسم الأشعة التشخيصية ) في مستشفى الخضراء في طرابلس للتأكد من رضاهم عن السلوك الأخلاقي لموظفي قسم الاشعة والخدمات المقدمة من قبل فنيي الأشعة في القسم. تم تحليل البيانات باستخدام إحصائيات وصفية عند فاصل الثقة 95 ٪ للمتوسط.

معظم العوامل التي تؤثر على رضا المريض من عدمه من شرح للمريض تقنية الفحص، والمعرفة والمعدات المستخدمة و الإجراءات الروتينية تشكل حوالي (76٪). ومع ذلك، فقد قاموا بعمل جيد في بعض الجوانب بما في ذلك مراقبة الحدود المهنية مع المرضى أثناء الفحص والإنصاف في تقديم الخدمات للمرضى خلال الفحص الإشعاعي، وكان التواصل الجيد من قبل طاقم قسم الأشعة حوالي (63٪)، والخدمات المقدمة من قبل الموظفين في القسم . أيضا، لا يوجد فرق معنوي في مستوى الرضا الذي يعاني منه المرضى في قسم التصوير الشعاعي إلا في الوقت الذي ينتظر فيه الفحص خلال اليوم المزدحم، وحالة المريض التي يمكن أن تتغير في أي وقت وخاصة اثناء التصوير الاشعاعي.:

أظهرت دراستنا رضا المريض وأخلاقيات جيدة من الفنيين في قسم الأشعة. ومع ذلك، هناك خلاف بسبب الانتظار الطويل وهذا هو ما يقلق المريض بسبب حالات الاكتظاظ في أوقات معينة.

الكلمات الرئيسية: مستشفى الخضراء، رضا المرضى، السلوك الأخلاقي / المهني، الأشعة، إدراك المرضى

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